

REMARKS

This amendment is submitted in response to an Office Action mailed March 15, 2004. Applicant respectfully requests reconsideration of the subject application as amended herein.

Claims 1-3, 5-11, and 13-17 remain in the present application. Claims 4, 12, and 18 have been canceled without prejudice. Claims 19-21 have been added to the present application.

In the March 15, 2004 Office Action, claims 1-4, 6-13, and 15-18 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,440,520 issued to Schutz et al. (hereinafter "Schutz") in view of European Patent Application 0 632 360 A1 by Weiser et al. (hereinafter "Weiser"). Claims 4, 12, and 18 were previously canceled from the present application, thereby rendering the rejection of such claims moot. As discussed below, Applicant has amended claims 1-3, 6-11, 13, and 15-17 to clearly distinguish over Schutz in view of Weiser.

Taking amended claim 1 as an example, the claim includes:

A processor comprising:

- a first port to receive a plurality of supply voltages from at least one external voltage regulator, each of the plurality of supply voltages to power a particular portion of the processor;

- a plurality of voltage sensors, each of the plurality of voltage sensors to monitor one of the plurality of supply voltages; and

- a second port to provide a plurality of control signals from the plurality of voltage sensors to the at least one voltage regulator, each of the plurality of control signals to indicate if a respective supply voltage is above or below a target value corresponding to a respective portion of the processor.

In amended claim 1, a processor includes a number of portions that are each separately powered by one of a number of supply voltages. Voltage sensors monitor the supply voltages and provide control signals. Each control signal indicates if a respective supply voltage is above or below the target voltage for a given portion of the processor.

Schutz and Weiser, in contrast, have nothing whatsoever to do with a processor that simultaneously uses multiple supply voltages. Schutz, for example, describes a processor that can be powered by any one of a number of voltage levels at any given time (Schutz: abstract; col. 4, lines 41-54). Similarly, Weiser describes a power supply level that can be varied over time to reduce the average power consumption of a computer system (Weiser: abstract).

Therefore, Applicant respectfully submits that Schutz and Weiser, either alone or combined, do not suggest, disclose, or enable a processor with “a plurality of voltage sensors ... to provide a plurality of control signals ..., each of the plurality of control signals to indicate if a respective supply voltage is above or below a target value corresponding to a respective portion of the processor,” as claimed in amended claim 1.

Thus, for at least the reasons discussed above, Applicant respectfully submits that amended claim 1 is not obvious in light of Schutz in view of Weiser.

Applicant submits that the reasoning presented above with respect to claim 1 similarly applies to claims 2, 3, 6-11, 13, and 15-17. Thus, for at least

the reasons discussed above, Applicant respectfully submits that claims 2, 3, 6-11, 13, and 15-17 are likewise not obvious in light of Schutz in view of Weiser.

In the March 15, 2004 Office Action, claims 5 and 14 were rejected under 35 U.S.C. § 103 as being unpatentable over Schutz in view of Weiser, further in view of European Patent Application EP 0 872 790 A1 by Shingo et al. (hereinafter "Shingo").

Claims 5 and 14 are dependent claims. Therefore, the reasoning presented above for claim 1 similarly applies to claims 5 and 14 with respect to Schutz and Weiser. Shingo was cited for teaching a voltage sensor including an op amp. Even assuming that the Office Action is correct with respect to the teachings of Shingo, Applicant respectfully submits that Shingo fails to cure the deficiencies of Schutz and Weiser as discussed above. Therefore, for at least the reasons discussed above, Applicant respectfully submits that claims 5 and 14 are not obvious over Schutz in view of Weiser, further in view of Shingo.

New claims 19-21 are also dependent claims. Therefore, for at least the reasons discussed above, Applicant respectfully submits that new claims 19-21 are not obvious over Schutz in view of Weiser, further in view of Shingo.

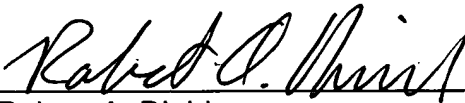
In conclusion, Applicant respectfully submits that claims 1-3, 5-11, 13-17, and 19-21 are now in a condition for allowance, and Applicant respectfully requests allowance of such claims.

Please charge any shortages and credit any overages to our Deposit Account No. 50-0221.

Respectfully submitted,

INTEL CORPORATION

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Robert A. Diehl
Reg. No. 40,992

INTEL LEGAL
SC4-202
P.O. Box 5326
Santa Clara, CA 95056-5326
Phone: (503) 712-1880
FAX: (503) 264-1729